

Amendment under PCT Article 34

CLAIMS

1. (Amended) A foil for a cathode of a capacitor, comprising:
5 an aluminum foil; and
a carbon-containing layer formed on a surface of said aluminum foil,
the foil further comprising:
an interposition layer that is formed between said aluminum foil
and said carbon-containing layer and contains aluminum and carbon,
10 wherein
said carbon-containing layer is formed so as to extend outward from
the surface of said aluminum foil.
2. The foil for a cathode of a capacitor according to claim 1, wherein
said carbon-containing layer includes therein an interposition material
15 containing aluminum and carbon.
3. (Deleted)
4. The foil for a cathode of a capacitor according to claim 1, wherein
said interposition layer constitutes a first surface portion that is
formed on at least a part of the surface of said aluminum foil and contains a
20 carbide of aluminum, and
said carbon-containing layer constitutes a second surface portion
that is formed so as to extend outward from said first surface portion.
5. A manufacturing method of a foil for a cathode of a capacitor,
comprising the steps of:
25 arranging an aluminum foil in a space containing a

hydrocarbon-containing substance; and

heating said aluminum foil.

6. The manufacturing method of a foil for a cathode of a capacitor .
according to claim 5, wherein said step of arranging the aluminum foil
5 involves adhering at least one kind selected from the group consisting of a
carbon-containing substance and an aluminum powder to a surface of the
aluminum foil and, then, arranging the aluminum foil in a space containing
a hydrocarbon-containing substance.

7. The manufacturing method of a foil for a cathode of a capacitor
10 according to claim 5, wherein said step of heating the aluminum foil is
carried out within a temperature range between 450°C or more and less
than 660°C.